APRIL/MAY 2023

CBT62 — ENVIRONMENTAL BIOTECHNOLOGY

Time : Three hours Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. What are Secondary pollutants?
2. Explain Mesosaprophytic zone.
3. What is Lagoons?
4. What is BOD?
5. Explain Recalcitrance.
6. Define Biomining.
7. What are Methanogens?
8. List out the types of biofuels.
9. What are Biosensors?
10. Recall TOL.

SECTION B — (5 × 5 = 25 marks)

Answer ALL questions.

11. (a) Write a short note on green house effect.

Or

(b) What are the different structure and function of ecosystem?

12. (a) List out the various physical characteristics of waste water.

Or

(b) Explain various methods used for assessing the quality of waste water.

13. (a) Organize factors causing molecular recalcitrance? Explain it.

Or

(b) Identify the environmental problems created during extracting and mining.

14. (a) Briefly explain about types of biofuels.

Or

(b) Narrate the bioaugmentation process for petroleum recovery.

15. (a) Explain the role of GEM in degradation of industrial pollutants.

Or

(b) Illustrate the microprobe technique.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. What are biogeochemical cycles? Explain in detail about nitrogen cycle with diagram.

17. Give a detailed account on anaerobic sludge digestion.

18. Discuss in detail about biodegradation of xenobiote compounds.

19. Describe the biotechnological strategies for petrochemical biodegradation.

20. List out the challenges and application of GEM in the environment.

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